IBSCA research seminar

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Title:

Ageing process and the progression of Alzheimer's disease like pathology: The astrocyte story

Abstract

Alzheimer's disease (AD) is the most prevalent form of dementia in elderly people and it remains an incurable disease, affecting millions of people worldwide. Ageing remains the most dominant risk of AD. Nevertheless, it is still not clear what the specific pathways are that are affected by age and attributed to AD. We have established and characterized different approaches to assess the ageing process in mice that are affiliated with AD pathology. Astrocyte play an important role in maintaining brain homeostasis. We have discovered that astrocyte from old APP mice used for AD research have an increase in their pro-inflammatory profile as compared to astrocyte in age-matched control mice. We have also discovered age-related pathways in astrocyte that may affect their activity leading to neurodegeneration. Our results suggest specific pathways that may attribute to a spreading of amyloid pathology in the brain and the development of AD.